

# Research and Evaluation Activities in USDA

## From the Food and Nutrition Service; Office of Analysis, Nutrition, and Evaluation

### *The School Breakfast Pilot Project*

The School Breakfast Program, authorized by the Child Nutrition Act of 1966, started as a pilot program to provide funding for school breakfasts to children in poor areas and areas where they had to travel a great distance to school. The intent was to provide a nutritious breakfast to children who might otherwise not receive one. The importance of a nutritious breakfast is supported by the growing body of evidence that has linked it to improved dietary status and enhanced school performance. Hence, many observers have urged that school breakfasts become more available.

Despite an increase in the number of schools offering the School Breakfast Program, the percentage of students who eat school breakfasts is considerably lower than the percentage who eat school lunch. Those eating school breakfasts are more likely to be poor and qualify for free or reduced-price breakfasts. Some people believe that a universal-free program would result in more children consuming a nutritious breakfast and beginning the school day with proper nutrition and ready to learn.

Within this context, Congress passed Section 109 of the William F. Goodling Child Nutrition Act of 1998 (P.L. 105-336), which authorized the Secretary of Agriculture, through the U.S. Department of Agriculture's Food and Nutrition Service (FNS), to conduct a 3-year pilot project beginning in the

2000-2001 school year that provided free school breakfasts to all students regardless of family income.

Six of the 386 school districts were selected from those that applied to participate in the pilot project:

- Boise, Idaho: Independent School District of Boise
- Columbiana, Alabama: Shelby County Board of Education
- Gulfport, Mississippi: Harrison County School District
- Phoenix, Arizona: Washington Elementary School District
- Santa Rosa, California: Santa Rosa City Schools
- Wichita, Kansas: Wichita Public Schools

A total of 143 elementary school units from the participating districts were grouped into matched pairs on the basis of several demographic variables. One school unit in each pair was randomly assigned to the treatment group (universal-free school breakfast) or the control group (regular school breakfast). Within each treatment and control school unit, about 30 students were selected for the evaluation. The total student sample size was 4,290 (2,190 treatment and 2,100 control). Data were collected from students, parents, teachers, school district staff, and school records during spring 2001.

FNS's evaluation of the 3-year project consists of an implementation study and an impact study. The implementation study describes how the schools choose to implement universal-free school breakfast, assesses the effect of students' participation in the universal-free school breakfast on administrative requirements and costs at the school and federal levels, and assesses nutrient

composition of the school breakfasts. The impact study assesses the effects of universal-free breakfast on a broad range of student outcomes: including school breakfast participation, breakfast consumption patterns, dietary intake, food security status, school attendance and tardiness, child health, cognitive functioning, classroom behavior and attentiveness, and academic achievement.

An interim report that provides results from the first year of the pilot was published in October 2002; a final report, in summer 2004. Additional information on the School Breakfast Pilot Project can be found at <http://www.fns.usda.gov/OANE/MENU/sbppilot/sbppnotice.htm>.

### *National School Lunch Program Application/Verification Pilot Projects*

This project responds to FNS's growing concern about program integrity issues associated with the current system by which School Food Authorities determine eligibility for free and reduced-price school meals. Twenty-two School Food Authorities across 16 States began testing pilot procedures in 2000-2001 to determine and verify children's eligibility for free and reduced-price school meals. Three models are being tested over a 3-year period to determine eligibility for these school meals: Up-Front Documentation, Graduated Verification, and Verify Direct Certification. Evaluation of the models will permit FNS to explore a variety of options to improve the targeting of free and reduced-price meals to income-eligible children.

The Year One Report will provide a descriptive statistical analysis of data FNS has collected from 19 School Food Authorities in 14 States that operated the pilot project in fiscal year 2000-2001. FNS is collecting administrative data from the participating pilot sites regarding several key program statistics such as percentage of children approved for free meals and reduced-price meals, number of meals served at free and reduced-price levels, and results of graduated and direct certification verification. Data reported by School Food Authorities to FNS for this purpose represent information all School Food Authorities are required to maintain for reporting purposes. These data allow FNS to compare changes in key program statistics in these School Food Authorities between the first pilot school year and the 2 pre-pilot years.

FNS anticipates conducting a more rigorous evaluation of the Up-Front Documentation and Graduated Verification pilot projects. Central to this evaluation are a comparison of the free and reduced-price approval status and an independent collection of income information for households in the pilot School Food Authorities. Hence, FNS will be able to address a broader range of issues than is possible through exclusive reliance upon School Food Authorities' administrative data. Results from this evaluation are scheduled for release in fiscal year 2003.

### ***Characteristics of Food Stamp Households***

During each month of fiscal year 2000, about 17.2 million people living in 7.3 million U.S. households received food stamps.

- **Most food stamp recipients are children or the elderly.** Over half (51 percent) are children; 10 percent, age 60 or older. Working-age women represent 27 percent of the caseload; working-age men, 11 percent.
- **Most food stamp households do not receive cash welfare benefits.** Nearly a third (32 percent) receive Supplemental Security Income; one-quarter (25 percent), Temporary Assistance for Needy Families benefits; and one-quarter (25 percent), Social Security benefits. Eight percent have no cash income of any kind.
- **Many food stamp recipients work.** Over one-fourth (27 percent) of food stamp households have earnings, the primary source of their income.
- **Food stamp households have little income.** Only 11 percent are above the poverty line, while 33 percent have incomes at or below half the poverty line. The typical food stamp households have gross income of \$620 per month and receive a monthly food stamp benefit of \$158. Food stamps account for over one-fifth of monthly funds (cash income plus food stamps) available to a typical household.
- **Food stamp households possess few resources.** The average food stamp household possesses only about \$156 in countable resources (including the nonexcluded portion of vehicles and the entire value of checking and savings accounts and other savings).
- **Most food stamp households are small.** The average food stamp household size is 2.3 but varies considerably by household composition. Households with children are relatively large, averaging 3.4 members. Households with elderly members tend to be smaller, averaging 1.3 members.

For more information on the *Characteristics of Food Stamp Households: Fiscal Year 2000*, visit [www.fns.usda.gov/OANE/MENU/published/FSP/Participation.htm](http://www.fns.usda.gov/OANE/MENU/published/FSP/Participation.htm).

### ***Rates of Food Stamp Program Participation***

An important measure of a program's performance is its ability to reach its target population. For over 15 years, the national food stamp participation rate—the percentage of eligible people who participate actively in the program—has been a standard for assessing the program's performance. *Trends in Food Stamp Program Participation Rates: 1994-1999* provides the latest information on the program's participation rates, based on data from the Census Bureau's Current Population Survey and administrative data.

**Overall Trends:** Participation rates fell by 17 percentage points between 1994 and 1999. While the number of eligible individuals fell by 16 percent, the number of participating individuals fell by 35 percent. The overall participation rate among people eligible for benefits was 57 percent in 1999, down from a high of 74 percent in 1994.

**Trends Among Subgroups:** Participation rates among children declined each year between 1994 and 1999, dropping from nearly 90 percent in 1994 to 68 percent by 1999. The decrease occurred between both preschool children and school-aged children. Participation rates fell both for individuals in single-parent households and for those in married-couple families with children.

By contrast, participation rates between 1994 and 1999 were fairly stable but constantly low among the elderly: about 30 percent of eligible seniors

participated. Among the disabled, about half of the eligible participants participated between 1994 and 1997. However, their participation rate rose to 61 percent by 1999. Participation rates declined each year among individuals living in households without any workers, dropping from 85 percent in 1994 to 70 percent in 1999. Among working-poor households, participation rates among those who were eligible were stable between 1994 and 1997 but fell between 1997 and 1999: an average of 53 and 48 percent, respectively.

Contrary to expectations, participation rates have fallen most rapidly among those living in *households that qualify for the largest benefits* (over half of the maximum allotment). In 1994, 98 percent of these individuals participated; by 1999, 78 percent participated. These households generally have the lowest income, relative to their household size.

### ***Assessment of Computer Matching in the Food Stamp Program***

Computer matching is a powerful management tool, which has increased the integrity and efficiency of the Food Stamp Program. This study examined how States are currently using or planning to use computer-matching strategies for error reduction.

Since 1991, States, in general, have significantly increased their use of computer matching to enhance program integrity. Advances in computer technology facilitated development of strategies to make fraud more difficult to commit and easier to detect. Technological advances, particularly the growth in communications networks, greatly increased States' matching capability, which led to more rapid

responses from external databases. For more information on Assessment of Computer Matching in the Food Stamp Program, visit <http://www.fns.usda.gov/OANE/MENU/Published/FSP/NewReleases.htm>.

### ***FNS Planning and Performance Measurement***

FNS is responsible for managing the Agency's strategic and operational planning systems. The Office of Analysis, Nutrition, and Evaluation (OANE) coordinates the Agency's contributions to the Department's strategic plan, performance plans, and performance reports, which are required by the Government Performance and Results Act (GPRA, P.L. 103-62). OANE also manages an internal process intended to align the Agency's operational priorities with the goals of the strategic and annual plans, as well as other key program and policy objectives.

One critical part of OANE's responsibilities is to identify and improve measures of program performance that link to FNS's strategic goals and objectives. The current FNS strategic plan, released in September 2000, includes two major goals and five objectives that cut across program lines and represent the shared purposes and intended outcomes of Federal nutrition assistance:

#### **1. Improved Nutrition of Children and Low-Income People**

- Improved Food Security
- Program Participants Make Healthy Food Choices
- Improved Nutritional Quality of Meals, Food Packages, Commodities, and Other Program Benefits

#### **2. Improved Stewardship of Federal Funds**

- Improved Benefit Accuracy and Reduced Fraud
- Improved Efficiency of Program Administration

For each objective, FNS has sought to develop performance measures that can be used to measure program performance and target improvement. For example, the Agency measures progress toward its objective to "improve food security" through the USDA food security measure, specifically focusing on reducing the prevalence of hunger among children and low-income people. FNS supplements the hunger measure, a subscale of the food security measure, with measures of "coverage"—the rate of participation among eligible people—for the major Federal nutrition assistance programs. Juxtaposing the prevalence of hunger among children and low-income people with rates of participation helps provide a basis for evaluating the relationship between the program participation output and the anti-hunger outcomes the programs are intended to influence.

Similarly, for its objective that "program participants make healthy food choices," FNS uses the Healthy Eating Index, a measure of diet quality developed by USDA's Center for Nutrition Policy and Promotion, to set targets to improve the nutrition status of children and low-income people. FNS also seeks to increase the rate of breastfeeding—the feeding practice judged by nutrition and health experts to be the best for infants—among mothers and infants participating in the Women, Infants, and Children (WIC) program.

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A number of significant challenges exist in developing performance measures for FNS programs; three are particularly significant:

1. **Program Structure:** Most Federal nutrition assistance programs operate as partnerships between the Federal Government and State and local authorities, so the link between Agency work performance and program effectiveness is indirect.

2. **“Context” of Program Performance:** As with many other Government programs, the outcome that the programs are intended to influence, such as reduction in hunger and improvement in diet quality, are also influenced by many factors beyond the Agency’s control.

3. **Data Limitations:** Data sources for many areas of performance are limited by constraints on Agency and program resources, including the need to reduce the burden on local program operators.

To deal with these challenges, FNS continually identifies and develops improved performance measures of its programs and operations in a number of areas. Working with program offices, OANE seeks to gain insight in specific aspects of program performance by leveraging internal Agency operational data, the results of oversight and review work; improving collection of program data; and developing stand-alone evaluation work.

Improvement in planning and performance measurement are necessarily incremental; over time, however, the broad framework of the strategic plan helps to ensure that the team and the Agency focus their efforts on the most critical areas of performance. These efforts should help the Agency gain new insights and develop and test innovative strategies that improve program effectiveness.